

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

**In the Matter of**

The Commission's Cable Horizontal and  
Vertical Ownership Limits

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MM Docket No. 92-264

**COMMENTS OF  
THE PROGRESS & FREEDOM FOUNDATION (PFF)**

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September 8, 2005

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**I. Introduction: The Need for a New Framework for Media Analysis**

As the Commission undertakes another review of its cable ownership rules, it yet again faces the challenge of fashioning defensible and legal media ownership limits. As it does so, the Commission desperately needs to adopt a new model for dealing with media market power issues and ownership rules in particular. This paper proposes a new framework for understanding the evolving media market and shows that cable ownership limits no longer make sense. In the converging, multi-platform media world that now exists, cable ownership limits are unnecessary since competition and diversity are flourishing.

For far too long, the Commission's mode of analysis has been preoccupied with what PFF's Randolph May refers to as "techno-functional

constructs.”<sup>2</sup> That is, the agency has adopted a platform-centric mentality that imagines media and communications operators as isolated islands, each requiring a distinct regulatory regime to achieve short-term policy goals.

It is time for this model to be thrown into the ash heap of regulatory history. Whatever validity this model may have had in the past, it is intellectually bankrupt today due to significant evolution in the media market. A new framework is needed that takes into account the radically different world media companies now operate in.

This paper will focus on two major shifts of profound importance to future media regulatory and ownership issues:

1. Media programming is moving away from a mass, linear, analog distribution architecture towards a converged, consumer-centric, digital network where content is decoupled from distribution platforms.
2. Distinctions between media providers are quickly blurring due to digital migration, significantly improving the choices programmers and consumers have for both content and delivery of content.

To elaborate, programming is moving away from tight relationships with specific distribution technologies and devices, viewed at specific times, as has historically been the case. Instead, both media services and content are decoupled from the distribution platforms and delivered on-demand, across a

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<sup>2</sup> Randolph May, “Calling for a Regulatory Overhaul, Bit by Bit,” CNet News.com, October 19, 2004, [http://news.com.com/Calling+for+a+regulatory+overhaul%2C+bit+by+bit/2010-1028\\_3-5415778.html](http://news.com.com/Calling+for+a+regulatory+overhaul%2C+bit+by+bit/2010-1028_3-5415778.html).

spectrum of distribution channels and devices. Programmers choose among multiple distribution channels to deliver their content, based on the audience they wish to reach. They may produce once and then redistribute many times and in many different forms. Consumers then choose the device most appropriate for when, where and how they wish to receive the content. You no longer must be sitting in front of a large tube tied to an antenna or coaxial cable, but can now consume video media, on demand, almost anywhere you are.

Meanwhile, with platforms shifting to digital infrastructures, media companies and telecommunications providers, new and old, are quickly entering each other's market space, competing to offer the same services to the same group of consumers and programmers. These are fundamental changes that will radically reshape how the media market will look and operate over the next five to ten years. The number of distribution channels continues to rise and the cost of distributing content is steadily falling. Such economics open up large, new content markets, particularly for niche programming. Furthermore, the evolving market guarantees that no single media provider can limit the flow of programming to the market – there are many other distribution channels emerging for content to reach the market should a media provider attempt stifle flow.

Regulation designed for programming in the analog, platform-centric environment is quickly being rendered obsolete in this emerging digital, platform-agnostic, fully networked environment. As Table 1 below illustrates, the analog era model of media regulation needs to be updated accordingly, and must be

rooted in the realities of the modern media marketplace instead of being tied to the “techno-functional constructs” of a bygone era.

The distinctions of the regulatory past would melt away under this new model. We would no longer consider “cable,” “satellite,” “broadcasters,” “telecom,” “Internet providers,” and others in isolation. Rather, this new model demands that public policy makers view these companies and sectors through the same prism that markets and consumers do: bit creators and movers. The only thing consumers care about at the end of the day is: (1) can they get an increasingly expanding variety of information bits (news, entertainment, phone, etc.) delivered to them; and (2) get those bits at a decent price. It makes no difference whether those bits are created or delivered by companies that we once referred to as “cable” or “satellite” or “broadcasters” or whatever else. Consumers are increasingly coming to view the formerly distinct sectors as part of one big bucket of bits they can dip into and gather the news, information and entertainment they desire, whenever, wherever, and however they want.

Importantly, in light of the fiercely competitive nature of the new media marketplace, this new model would embrace market forces and reject heavy-handed, command-and-control methods of regulation. Consequently, cable ownership caps would be abolished and replaced with reliance on the nation’s antitrust laws should the need arise at some point to address market power concerns.

This paper aims to provide a framework for understanding the changing media market. It investigates the primary structural shifts and what the

corresponding economic consequences are. Next, the paper provides an extensive look into the media and technological convergence that is currently underway. Finally, it evaluates media ownership caps in light of the earlier evidence.

**Table 1: A New Digital Age / Platform-Agnostic Media Model**

	Old Analog Era / Platform-Centric Media Model	New Digital Age / Platform-Agnostic Media Model
<i>Bit transmission:</i>	Analog	Digital
<i>Nature of consumption:</i>	Passive	Interactive
<i>Programming is...</i>	Force-fed, producer-specified	On-demand, user-specified
<i>Media sectors &amp; technologies are...</i>	Distinct; limited substitution among them	Overlapping; extensive substitution among them
<i>Options for viewing &amp; listening are...</i>	Limited; consumers tied to specific outlets in specific places	Extensive; a multi-screen, multi-media, multi-tasking world of media choices
<i>Importance of Geography:</i>	Geographic limitations of media sectors & technologies	Borderless media sectors & technologies
<i>Primary media distribution strategy:</i>	One-to-many <i>broadcasting</i> ; <i>generalizing</i> the media experience is key	One-to-one or many-to-many <i>narrowcasting</i> ; <i>specializing</i> the media experience is key
<i>Journalism:</i>	Viewed as an elite profession	Increasingly a public, participatory phenomenon
<i>Key media problem:</i>	Information scarcity: Society and government struggle to manage limited choices	Information overload: Society and government struggle to manage an abundance of options
<i>Status of competition:</i>	Oligopolistic and staid	Fiercely competitive and rapidly evolving
<i>Role of Government:</i>	Command-and-control regulation (entry and exit barriers, price controls, content restrictions and mandates, ownership caps)	Reliance on markets forces; minimal government intervention outside of antitrust laws

## II. Converging Bitstreams – An Evolving Media Framework

The media landscape has radically evolved in the 13 years since cable ownership rules were put into place. The main driver of change in the media industry is the transition to a digital infrastructure. Ten years ago, in his eloquent paean to the digital age, *Being Digital*, Nicholas Negroponte coined the phrase “bits are bits.”<sup>3</sup> Negroponte revealed that, even in the mid-1990s, digitized bits of information were commingling and becoming more outlet-agnostic. With the rise of the Internet, new digital transmission and delivery options, advancing compression techniques, high-speed fiber optic lines, and a whole lot of computing power everywhere in between, Negroponte predicted that it would only be a matter of time before everyone understood and accepted the inevitability of bit convergence. Old industry, sector, and outlet-based media distinctions would gradually wither away and be replaced by endless streams of digital bits of information flowing across multiple transmission paths and through countless delivery mechanisms.<sup>4</sup> While the bit transition is by no means complete, and very likely still only in the beginning stages, it is already creating major structural changes in the video programming market.

### A. New Media Architecture: Consumer-Centric Digital Networks

The most important change in the media universe is the movement away from mass, linear content distribution and instead towards a converged,

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<sup>3</sup> Nicholas Negroponte, *Being Digital* (New York: Knopf, 1995), p. 9.

<sup>4</sup> Technology writer George Gilder made similar predictions in the early and mid-1990s. See George Gilder, *Life after Television: The Coming Transformation of Media and American Life* (New York: W.W. Norton & Company, 1994).



consumer-centric, digital network model. Historically, programming has been tightly coupled with a particular distribution channel and display device. For instance, circa 1980 you watched sitcoms via broadcast television on your TV during the time that the network believed it could garner the largest audience. If you were unable to watch during that time, you had to wait for a rerun to see it again (if you were lucky). Other types of video content, such as motion pictures, were distributed via film reels played at the cinema and only had limited redistribution on television, typically long after the movie was originally released. After 1980, the emergence of VCRs helped broaden and personalize the movie and television experience somewhat.

Today, however, the media universe is rapidly shifting towards a completely digitized architecture, in which media bitstreams may be delivered on-demand across a network of distribution channels and “consumed” on a wide array of devices. As such, the content is decoupled from the distribution channel and the device. The digital network passes the bits around the network along cable, satellite and broadcast, via the Internet, on cell phones and across wireless networks. The bits do not care which pipe they take to reach the consumer. Devices plug into this infrastructure (often wirelessly), read the bits and display media content to the user. Content no longer needs to have a tight relationship with specific distribution platforms and receiving devices.<sup>5</sup>

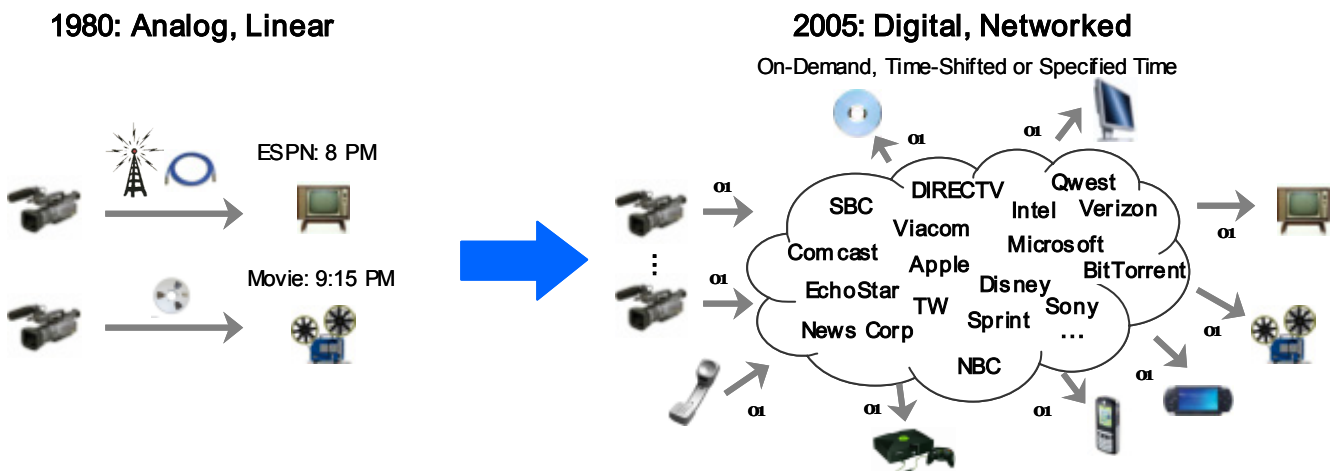
Furthermore, content no longer must be distributed in mass streams and viewed during specific time windows in a network-determined order. Instead,

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<sup>5</sup> HP and Intel are now offering a digital media solution based on these characteristics. See [http://www.hpintelco.net/pdf/solutions/telecom/rich\\_media/digital\\_media\\_platform\\_slides.pdf](http://www.hpintelco.net/pdf/solutions/telecom/rich_media/digital_media_platform_slides.pdf)

consumers are increasingly able to choose when to view content, which device is most appropriate for them, and how and where they wish to receive the content. Consumers choose from a range of devices to do so, each of which offers different functionality pertinent to how the consumer wants to receive and consumer the content. This may be on-the-go, time-delayed, space-shifted, via the Internet, on a cell phone or other mobile device, bundled with a video game or a host of many other ways. Content that consumers do not care to view or that they find undesirable may be easily filtered out, blocked or fast-forwarded through. Furthermore, media and technology companies are quickly developing technology that allows consumers to search for content and request it on-demand.<sup>6</sup> In this manner, consumers build their own media “playlists” specific to their interests and lifestyle. The diagram below outlines the evolving structure:

**Figure 1: Transitioning Media Distribution Architecture**



<sup>6</sup> See Josh McHugh, "The Super Network," *Wired*, September 2005, <http://www.wired.com/wired/archive/13.09/yahoo.html>; and Maija Palmer, "Anatomy Positions Itself for Content Wars," *Financial Times*, August 28, 2005, <http://news.ft.com/cms/s/70c7fe24-17f2-11da-a14b-00000e2511c8.html>.

Video programmers may distribute their content bitstreams across the network via numerous distribution channels, from traditional television programming to over the Internet as streaming video, RSS feeds, IPTV, and BitTorrent downloads. And this is exactly what they are doing. Media companies are moving towards more multi-platform distribution models. Many no longer view themselves as “television networks” or “newspapers,” but instead as “multi-media” content firms.<sup>7</sup> MTV’s president refers to the model as “multi-platform fornication” and Arthur Sulzberger Jr. of *The New York Times* describes it as “platform-agnostic”—that is, the attempt to deliver one’s content across every conceivable platform.<sup>8</sup>

This is an evolving business model resulting from the decoupling of content and platform. Such a business model presents a solid value-proposition to consumers, advertisers and media companies alike.<sup>9</sup> The value that content companies are able to derive from their property has been limited by their ability to provide it to consumers when and where they want it. Mass, linear distribution limits a programmer’s ability to get full value from their content as this content is being broadcast at the time the network deems most appropriate, instead of the consumer. Consider that there are nearly thirty-one million hours of video programming offered annually and that only a tiny fragment of this content can

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<sup>7</sup> One ESPN executive says, “We are not a television company.” See Frank Rose, “ESPN Thinks Outside the Box,” *Wired*, September 2005, <http://www.wired.com/wired/archive/13.09/espn.html>; Anthony Bianco, Lauren Gard and John Rossant, “The Future of the New York Times,” *Business Week*, January 15, 2005, [http://www.businessweek.com/magazine/content/05\\_03/b3916001\\_mz001.htm](http://www.businessweek.com/magazine/content/05_03/b3916001_mz001.htm).

<sup>8</sup> Ibid; Dave Itzkoff, “Every Network that Rises Must Converge,” *The New York Times*, August 28, 2005, <http://www.nytimes.com/2005/08/28/arts/television/28itzk.html>.

<sup>9</sup> For example, see Brian Steinberg, “Going Beyond TV to Woo Hip Youth,” *The Wall Street Journal*, August 26, 2005, <http://online.wsj.com/article/0,,SB112501387495623644,00.html>.

ever be viewed, even if the consumer desires to do so. With a digital structure however, consumers are now much more capable of receiving the programming they desire, whenever they want it, regardless of whether they are able to view it during the scheduled program time. Media programmers and distributors are quickly moving to fill this demand. While some innovative media providers like MTV and ESPN are already distributing media in this manner, over the next five to ten years, this will become the norm in the media universe. It is important to recognize that this shifting framework has important regulatory implications too. In sum, most of the old policy assumptions are dead and new thinking is required.

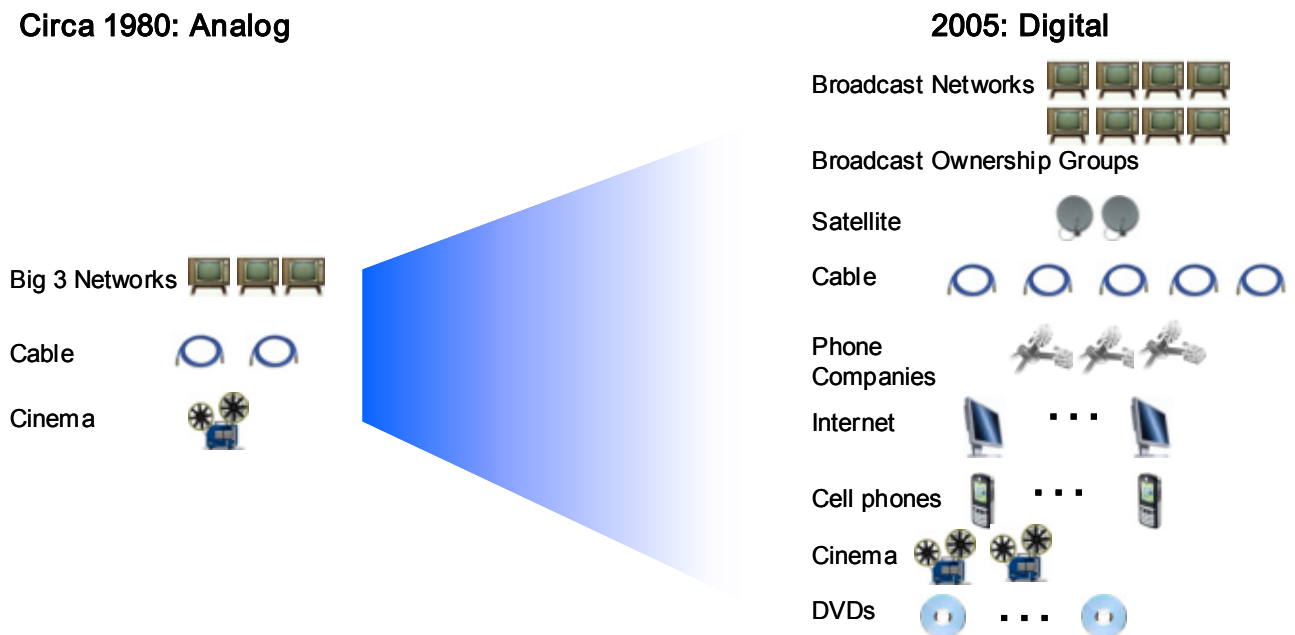
## **B. An Explosion of Outlets**

With the transition to digital bitstreams, media services may now be provided through many different transmission technologies. When video, voice and data are digitized, they are indistinguishable to the network and can be passed along many different platforms so long as there is ample bandwidth. Firms that historically specialized in one type of bit creation or transmission, such as voice, are now quickly moving to pass along all other bits. As was shown in Figure 1 above, content is being distributed through a host of traditionally different providers, from cable to telephone.

This has two major consequences. First, the converging technology is opening up a host of new sources for receiving video programming. Figure 2 below provides a sense of just how much programming sources have

proliferating over the past twenty-five years. Secondly, it increases competition between each of the players, yielding improved service offerings and pricing.

**Figure 2: Video Programming Sources**



### **C. Increased Programming Access and Flow**

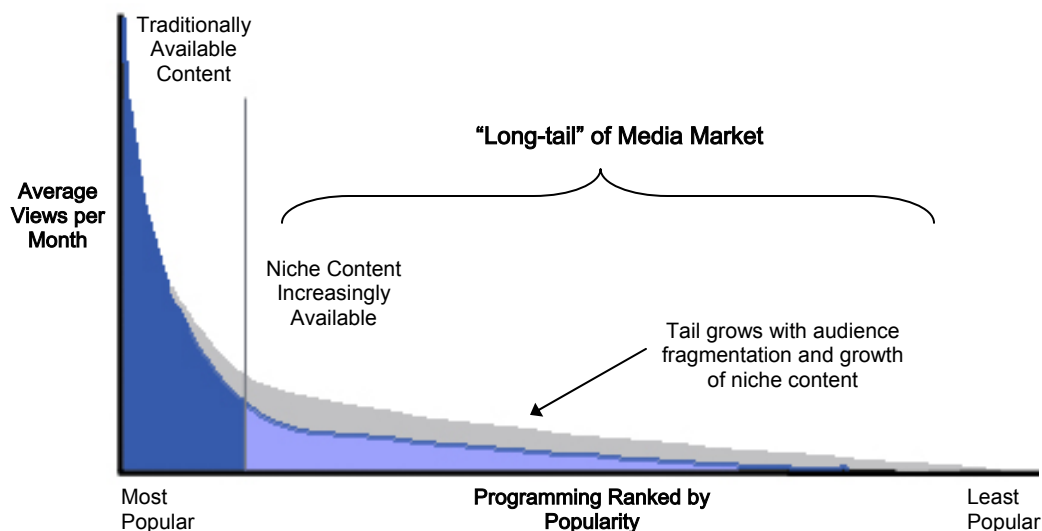
The evolving digital architecture is vastly increasing access and flow of content to the marketplace by changing the economics of media distribution. Lower distribution costs coupled with the availability of many new distribution channels is opening up new content markets and enabling nearly anyone with content to affordably distribute it to large audiences. As a result, it is now nearly impossible for any one media firm to restrict or impede the flow of content to consumers.

### 1) Access to the Market's "Long-Tail"

In economic terms, the significant change resulting from a converging digital infrastructure has been a dramatic decrease in the costs required to distribute content. As a result, the audience size required to support content distribution has fallen off, opening up a huge market for niche programming.

The media content market has a "long-tail" structure. This is to say that there is a large appetite for a few mass hits, and a much smaller appetite for the majority of other, more tailored content. The long-tail portion of the market includes everything from niche programming to once-popular, archived content that may now only have a limited audience. This structure can be seen in Figure 3 below.<sup>10</sup>

**Figure 3: Media Market Long-Tail**



<sup>10</sup> Chris Anderson, "The Long Tail," *Wired Magazine*, October 2004, <http://www.wired.com/wired/archive/12.10/tail.html>.

Historically, the long-tail portion of demand has been difficult to fill because demand was not significant enough to support the cost of distributing content to such limited audiences. Large media companies who invested heavily to create their content and distribution infrastructures recoup those costs by offering programming to the largest audiences possible during the times of day people are most likely to be watching. This meant networks distributed mass content designed to reach the broadest possible tastes. In fact, the whole broadcast business model was built on such a one-to-many distribution model. Distributing niche and limited-demand content, especially at hours people were able to watch, historically was just not economically viable. This limited a large portion of content from reaching the market, reducing value for both the consumers and the producers.

Consider the example of a hit show with certain niche audiences that is cancelled to make room for programming that will potentially be more popular. Such shows often still have a sizable audience who would like to continue viewing the program, yet are unable to do so.<sup>11</sup> Now however, distribution costs have fallen to the point where it is indeed economically feasible to distribute limited-audience programming over new channels or other outlets (DVD or Internet, for example), thereby fragmenting the traditional audience and creating a large and viable market for niche programming.<sup>12</sup>

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<sup>11</sup> Fans of popular shows sometimes have “save campaigns” when the show is facing cancellation. See for example: Bill Keveney, “‘Angel’ Fans Try Like the Devil to Revive Show,” *USA Today*, April 12, 2004, [http://www.usatoday.com/life/television/news/2004-04-12-angel-fans\\_x.htm](http://www.usatoday.com/life/television/news/2004-04-12-angel-fans_x.htm).

<sup>12</sup> “Television Networks in the 21<sup>st</sup> Century,” *Deloitte - Technology, Media and Communications* April 2005, [http://www.deloitte.com/dtt/cda/doc/content/dtt\\_tmt\\_TelevisiionnetworksGLOBAL\\_042005.pdf](http://www.deloitte.com/dtt/cda/doc/content/dtt_tmt_TelevisiionnetworksGLOBAL_042005.pdf).

These changing economics yield a number of important results. First and foremost, it opens up a huge amount of new and diverse content to the market, far beyond just popular, mass-market content. Distributors and programmers have an increasing economic incentive to make available a much wider spectrum of audience-tailored content, both old and new. Furthermore, with a digital infrastructure, they are equipped with the technological tools necessary to do so. Consumers now, and increasingly in the future, have the option of viewing content specific to their own unique tastes and interests, regardless of the potential audience size.

Second, the combined decrease in distribution and production costs dramatically increases the number of content producers. As it is now economically viable to meet consumer demand for niche programming, new programmers, including amateurs and small media shops, will enter this historically underserved market. In essence, the long-tail portion of the market will continue to grow as more specialized content is produced and made available over multiple distribution channels.

An excellent example of this is the comedy series “Red vs. Blue,” created by a few friends and distributed solely online.<sup>13</sup> New episodes are released weekly and archives of old seasons are made available through their website.<sup>14</sup> Shows are “filmed” entirely within the popular “Halo” video game by manipulating game elements and digitally recording them using a very inexpensive technique

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<sup>13</sup> Clive Thompson, “The Xbox Auteurs,” *The New York Times*, August 7, 2005, <http://www.nytimes.com/2005/08/07/magazine/07MACHINI.html?ei=5090&en=a0b469a4346f3cbb&ex=1281067200&adxnnl=1&partner=rssuserland&emc=rss&adxnnlx=1125849764-2QCUzubxZOCbPwKP1DPoug>.

<sup>14</sup> See <http://rvb.roosterteeth.com/home.php>



called “machinima.” While these shows are niche programming designed with a highly specific audience in mind, the digital infrastructure has enabled the creators to cheaply distribute their shows and even to reach nearly a million viewers weekly.<sup>15</sup> Distribution to this audience and on this scale would have been prohibitively costly, or simply technologically impossible, in previous decades. Additional examples of this sort of organic micro-programming are described in Section D3 below.

## *2) Unrestricted Flow of Programming*

The combination of ongoing digital convergence and an increase in market innovation and entry makes it nearly impossible for any media company to restrict the flow of programming in the market. While large media conglomerates in the old analog era may have had the ability to artificially restrain content that flowed across their distribution pipes, this is no longer the case today.

Any media company that attempts to limit programmers or programming from reaching the market will be largely ineffective at doing so. They would be hard-pressed to restrict bitstreams from reaching the market with the many alternative distribution channels available, as described earlier. For example, if a cable firm restricted programming or access to its pipes, then programmers may distribute that content via other outlets, such as DBS, the Internet or telecommunications companies. Even in those rural areas that have fewer infrastructure options relative to urban consumers, any move by an incumbent

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<sup>15</sup> Ibid Clive Thompson.

provider to restrict the flow of content would result in an immediate consumer backlash and send a signal to the market that a wonderful entry opportunity exists to counter such foolishness.

In fact, it is now easier than ever before in history for programmers to reach the market. Programmers unable to find distribution through a cable provider now have alternatives that did not exist even 15 years ago. While programming via one distribution channel may have once been considered better than another, consumers will increasingly care little whether the bitstream is coming from an Internet distributor, their cable subscription or somewhere else.<sup>16</sup> With Internet companies continuing to launch advanced video programming search technology, consumers will be able to find whatever programming they want. As the next section reveals, there are already devices on the market today such as the “SlingBox” which allow consumers to move their old video feeds around at the click of the button so that they can watch TV wherever they are at in the United States using their laptop computers. This foreshadows the coming world of instantaneous and fully searchable video programming that can be called up whenever consumers demand it, wherever they want to consume it.

#### **D. The Many Flavors of Media Convergence**

Now that we have set up a framework for thinking about the evolving media marketplace, in this section we dive deep into many examples of convergence occurring in the market. By providing this litany of examples, we

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<sup>16</sup> Thomas Goetz, “Reinventing Television,” *Wired Magazine*, August 2005, <http://www.wired.com/wired/archive/13.09/stewart.html>.

hope to provide ample evidence that the new media model presented above is already at work in the marketplace today.

*1) Platform Proliferation & Delivery Diversification*

- **In mid-2005, Viacom launched three new online platforms** to deliver high-quality video programming to the public on the MTV, VH1 and Nickelodeon web sites – further evidence of media firms taking advantage of the emerging digital architecture.<sup>17</sup> These online “channels” offer programs, music and movies similar to what viewers have seen on the cable and satellite television equivalents. MTV’s offering, “Overdrive,” is referred to as a “broadband video channel.”<sup>18</sup> This web-based “channel” offers video quality and content similar to what is seen on MTV’s cable television channel, but it also offers a host of customizable features, such as the ability to build custom playlists, of content ranging from music videos to news to traditional show segments.
- **News Corp. recently acknowledged they face a changing market** and need to adapt in order to remain competitive. Rupert Murdoch said in a recent speech, “What is happening is, in short, a revolution in the way young people are accessing news....In the face of this revolution, however, we’ve been slow to react....In this spirit, we’re now turning to the

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<sup>17</sup> Anne Becker, “Viacom Expands Broadband,” *Broadcasting & Cable*, July 6, 2005, <http://www.broadcastingcable.com/article/CA623503.html?display=Breaking+News&referral=SUPP>

<sup>18</sup> See [www.mtv.com/overdrive](http://www.mtv.com/overdrive).

Internet.”<sup>19</sup> Accordingly, News Corp. formed the Fox Interactive Media unit, a new division that will unify all of the company’s interactive assets and services under one umbrella.<sup>20</sup> “It will provide the ultimate home base for users’ news, information, entertainment and community needs,” the firm proclaimed in a press release announcing the unit’s formation.<sup>21</sup> Further, Fox has acquired the online firm Intermix Media, and just announced plans to spend as much as \$1 to \$2 billion on further Internet-related acquisitions.<sup>22</sup>

- **News broadcasters are experimenting with multiple delivery models** for their programs to compete more effectively.<sup>23</sup> CBS News recently announcement it will “move from a primarily television and radio news-based operation to a 24-hour, on-demand news service, available across many platforms...”<sup>24</sup> This effort will “integrate [CBS] personnel and other global newsgathering resources to provide exclusive, original reporting

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<sup>19</sup> Rupert Murdoch, speech to the American Society of Newspaper Editors, April 13, 2005, [http://www.newscorp.com/news/news\\_247.html](http://www.newscorp.com/news/news_247.html).

<sup>20</sup> Ken Kerschbaumer, “Fox Creates Interactive Division, *Broadcasting & Cable*, July 18, 2005, <http://www.broadcastingcable.com/article/CA626396.html?display=Breaking+News&referral=SUPP>

<sup>21</sup> “News Corporation Forms New Internet Unit,” News Corporation, *Press Release*, July 15, 2005, [http://www.newscorp.com/news/news\\_250.html](http://www.newscorp.com/news/news_250.html)

<sup>22</sup> Julia Angwin, “News Corp. Unites TV Web Activities Under One Unit,” *The Wall Street Journal*, July 18, 2005, [http://online.wsj.com/article\\_print/0,,SB112145394931387060,00.html](http://online.wsj.com/article_print/0,,SB112145394931387060,00.html); and Julia Angwin, “News Corp. Agrees To Buy Web Firm Intermix Media,” *The Wall Street Journal*, July 19, 2005, [http://online.wsj.com/article\\_print/0,,SB112169449806688282,00.html](http://online.wsj.com/article_print/0,,SB112169449806688282,00.html); and Aline van Duyn, “News Corp Could Spend \$2bn on Web acquisitions,” August 10, 2005, <http://news.ft.com/cms/s/db8d72e0-09e0-11da-b870-00000e2511c8.html>.

<sup>23</sup> Brian Steinberg and Christopher Lawton, “TV News Outlets Revamp Web Sites,” *The Wall Street Journal*, July 19, 2005, p. B4.

<sup>24</sup> “CBS Digital Media and CBS News Announce Broadband 24-Hour News Network,” CBS News, July 12, 2005, p. 1, [http://www.cbsnews.com/htdocs/pdf/Web\\_announcement\\_logo\\_new.pdf](http://www.cbsnews.com/htdocs/pdf/Web_announcement_logo_new.pdf)

and commentary around the clock.”<sup>25</sup> CBS News refers to the plan as its “cable news bypass” strategy, but it really bypasses all traditional TV news and offers consumers the ability to access all traditional CBS news content via a myriad of online, interactive services, including podcasts of CBS news reports. It is likely that broadcasters will step up efforts such as these since their nightly broadcast news operations have lost significant market share to cable and Internet news outlets in recent years (see Table 2). Similarly, an April 2005 Jupiter Research survey revealed that 26 percent of online adults prefer the Internet their main source of news, up from 19 percent in 2001.<sup>26</sup>

**Table 2: Select News Source Used by Consumers (1993-2004)**

	1993	1996	1998	2000	2002	2004
Network nightly news	60%	42%	38%	30%	32%	34%
Cable news channels	35%	26%	60%	62%	75%	68%
Internet	—	3%	13%	23%	25%	29%

Source: eMarketer, Inc., Pew Research Center for the People and the Press, 2004, Business Week, April 2005

- **Internet webcasting is quickly become a realistic media delivery option** for many traditional TV broadcasters. For example, in March 2005, NBC debuted its new sitcom *The Office* on the Internet a week before it premiered on broadcast network television.<sup>27</sup> Similarly, on July 19, 2005, CBS made a new episode of one its programs, *Big Brother*, available

<sup>25</sup> Ibid.

<sup>26</sup> “U.S. Online Adults Who Prefer the Internet as Their Main Source of National and International News, 2001 & 2005,” *eMarketer.com*, April 2005, <http://www.emarketer.com>

<sup>27</sup> Anne Becker, “NBC’s *Office* Gets Web Broadcast,” *Broadcasting & Cable*, March 16, 2005, <http://www.broadcastingcable.com/article/CA511340.html>

online.<sup>28</sup> The shows was delayed due to President Bush's announcement of his new Supreme Court pick, so CBS decided to put the program online for viewers to see at its regularly scheduled time. And almost all popular TV dramas and comedies are now available on DVDs, and some clips can be downloaded directly from websites.

- **Many television networks have already experimented** with multiple product placement and delivery techniques by broadcasting certain programs on multiple outlets they own. For example, NBC debuts *The West Wing* on its affiliated broadcast TV stations, but then rebroadcasts it a very short time later on its Bravo cable network. Similarly, Disney can choose to broadcast a new movie on its ABC broadcast affiliates, or its Disney Channel on cable, or release it immediately on DVD. These multicasting options are proliferating rapidly.<sup>29</sup>
- **Internet television holds enormous promise as a new distribution channel.**<sup>30</sup> Also know as Internet-protocol television, or "IPTV," IPTV relies on packet-switched technology to allow content producers to transmit media the same way data has been delivered on the Net for many years. It will allow many new players to instantly become broadcasters in their

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<sup>28</sup> Ben Grossman, "CBS First: *Brother* from Another Platform," *Broadcasting & Cable*, July 20, 2005, <http://www.broadcastingcable.com/article/CA628268.html?display=Breaking+News>

<sup>29</sup> In economic parlance this known as "versioning." "It means offering your information product in different versions for different market segments," note economists Carl Shapiro and Hal Varian. Carl Shapiro and Hal Varian, *Information Rules: A Strategic Guide to the Network Economy* (Boston, MA: Harvard Business School Press, 1999) p. 54.

<sup>30</sup> Michael Grebb, "Telcos Prep for IPTV Play," *Wired News*, August 3, 2005, <http://www.wired.com/news/business/0,1367,68362,00.html>

own right. Telephone giants such as SBC Communications are rolling out IPTV-based services in direct competition with traditional cable companies.<sup>31</sup> Time-Warner has recently launched a trial version of IPTV to 9,000 of their broadband subscribers to test out the technology.<sup>32</sup> Microsoft has made significant IPTV investments too.<sup>33</sup> The company is aggressively deploying IPTV software solutions for video delivery to network operators worldwide through its "Microsoft TV IPTV Edition" system.<sup>34</sup> Even telecommunications technology giant Siemens is developing an IPTV software package to try and compete with Microsoft.<sup>35</sup>

While there are only 1.9 million IPTV subscribers, that number is projected to grow to 25.3 million by 2008 according to eMarketer, Inc.<sup>36</sup> Importantly, unlike traditional broadcast spectrum, which lawmakers have argued must be regulated because it is supposedly scarce, IPTV or packet-switched television will essentially have unlimited bandwidth.

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<sup>31</sup> John Eggerton, "Hill Ponders Regulating Convergence," *Broadcasting & Cable*, April 20, 2005, <http://www.broadcastingcable.com/article/CA526456.html?display=Breaking+News&referral=SUPP>

<sup>32</sup> Ken Kerschbaumer, TV on the PC Gets Real, *Broadcasting & Cable*, August 8, 2005, <http://www.broadcastingcable.com/article/CA632697.html?&display=Features&referral=SUPP>

<sup>33</sup> Jay Greene, Heather Green, and Andy Reinhart, "Microsoft May Be a TV Star Yet," *Business Week*, February 7, 2005, [http://www.businessweek.com/magazine/content/05\\_06/b3919124\\_mz063.htm](http://www.businessweek.com/magazine/content/05_06/b3919124_mz063.htm)

<sup>34</sup> See [http://www.microsoft.com/tv/content/Solutions/IPTV/mstv\\_IPTV\\_Overview.msp](http://www.microsoft.com/tv/content/Solutions/IPTV/mstv_IPTV_Overview.msp)

<sup>35</sup> Marguerite Reardon, "Siemens Tackles Microsoft IPTV Dominance," CNet News.com, June 13, 2005, [http://news.com.com/Siemens+tackles+Microsoft+IPTV+dominance/2100-1034\\_3-5744410.html](http://news.com.com/Siemens+tackles+Microsoft+IPTV+dominance/2100-1034_3-5744410.html).

<sup>36</sup> "IPTV Subscribers Worldwide, 2004 & 2008," *eMarketer.com*, March 2005, <http://www.emarketer.com>

In this new IPTV universe, consumers will have much more power over the programming they want to see. Just as TiVo and personal video recorders (PVRs) have given consumers greater ability to customize programming to their own viewing habits, so to will IPTV further expand customization and control. As a result, it will be increasingly difficult for consumers to even identify the actual distribution channel for the content they are watching since they will just call it up via search functions on their systems.<sup>37</sup> As Bill Smith, chief technology officer of BellSouth Corp., recently told Reuters: “I don’t even know what network most of the programs I watch now are on, because I entered in my TiVo. I couldn’t tell you, is it on ABC or Fox. I just don’t even know, and I don’t care anymore.”<sup>38</sup>

- **Cable and satellite are moving away from the old coach potato model of “browse” to the Internet model of “search,”** predict cable industry analysts Craig Moffett and Amelia Wong of the investment firm of Sanford C. Bernstein. They note: “Video-on-demand libraries and digital video recorders are training customers to expect what they want, when they want it. In the face of this increased choice, the way we consume television will profoundly change. Time and channel grids will increasingly

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<sup>37</sup> See Craig Moffett and Amelia Wong, “Cable and Satellite: Search versus Browse,” Sanford C. Bernstein & Co. *Bernstein Research Call*, July 14, 2005.

<sup>38</sup> Quoted in Kenneth Li, “TV Seen Following Net Model,” Reuters, August 12, 2005, [http://in.today.reuters.com/news/newsArticle.aspx?type=technologyNews&storyID=2005-08-12T043842Z\\_01\\_NOOTR\\_RTRJONC\\_0\\_India-212424-1.xml](http://in.today.reuters.com/news/newsArticle.aspx?type=technologyNews&storyID=2005-08-12T043842Z_01_NOOTR_RTRJONC_0_India-212424-1.xml)



be replaced by Google-like searches. The paradigm for the TV interface will shift from 'browse' to 'search.'”

- In July 2005, online giant AOL and satellite radio provider XM announced a partnership called “Network Live” to offer concerts, comedy shows and other events online, over mobile devices, and through other media platforms.<sup>39</sup> Network Live will be tap the same model that AOL used to broadcast the global “Live 8” concerts online on July 2. All of the Live 8 concerts were shown on AOL’s website at no charge while portions of the show were broadcast on MTV and then also rebroadcast on ABC’s network television stations. The ABC broadcast of the concert netted 2.9 million viewers, while the MTV broadcast drew 1.5 million. But the AOL webcast of the event attracted a far more impressive 5 million unique visitors.<sup>40</sup> This led media analyst Tom Wolzien to predict that “History may well say,” that this was the day that the Net truly “became a mass distribution medium.”<sup>41</sup> Likewise, *The New York Times* referred to it as “a watershed event in the development of Internet video.”<sup>42</sup>

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<sup>39</sup> “AEG, America Online and XM Satellite Radio Join Forces with Executive Producer of Live 8, Kevin Wall, to Create ‘Network Live,’” XM Satellite Radio *Press Release*, July 12, 2005, [http://www.xmradio.com/newsroom/screen/pr\\_2005\\_07\\_12.html](http://www.xmradio.com/newsroom/screen/pr_2005_07_12.html)

<sup>40</sup> Annys Shin, “Entertainment Company Created by AOL, XM Radio,” *The Washington Post*, July 13, 2005, p. D5, [http://www.washingtonpost.com/wp-dyn/content/article/2005/07/12/AR2005071201664.html?nav=rss\\_business](http://www.washingtonpost.com/wp-dyn/content/article/2005/07/12/AR2005071201664.html?nav=rss_business)

<sup>41</sup> Quoted in Christopher Lawton, “Questions for Jim Bankoff,” *The Wall Street Journal*, July 20, 2004, p. B4A.

<sup>42</sup> Saul Hansel, “More People Turn to the Web to Watch TV,” *The New York Times*, August 1, 2005, <http://www.nytimes.com/2005/08/01/technology/01video.html?oref=login>

## 2) *Anywhere, Anytime Mobile Media*

- **Portable multimedia and gaming devices merge multiple media sources** and defy traditional regulatory classifications. For example, the Sony PlayStation Portable (PSP) was launched with much fanfare in the Christmas season of 2004. The PSP offered consumers the ability to play video games and watch movies anywhere they wanted. Creative users quickly tinkered with the device to make it also surf the Internet, download content, and exchange instant messages with friends.<sup>43</sup> Realizing there was no way to stop such tinkering, Sony announced in late July 2005 that it would release software updates for the PSP to allow Internet browsing and the downloading of TV programs.<sup>44</sup>
- **Convergence is at work in the wireless / mobile media sector.** Many companies are eyeing mobile phones as the next major media growth opportunity.<sup>45</sup> Several major programmers are currently delivering video news reports to cell phones,<sup>46</sup> as well as mini-dramas and soap operas called “mobisodes” (short for “mobile episodes”).<sup>47</sup> For example, in late 2004, Fox started developing a cell phone mobisode version of their hit

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<sup>43</sup> Mike Musgrove, “Tapping into Tinkering,” *The Washington Post*, July 12, 2005, p. D1.

<sup>44</sup> Martyn Williams, “Sony’s PSP Goes Online,” *PC World*, July 21, 2005, <http://www.pcworld.com/news/article/0,aid,121890,00.asp>

<sup>45</sup> Valerie Milano, “TV Programmers See Big Opportunities in Mobile Phones,” *Communications Daily*, January 25, 2005, p. 3.

<sup>46</sup> Ken Kerschbaumer, “Dialing for News,” *Broadcasting & Cable*, January 2, 2005, p. 43.

<sup>47</sup> Yuki Noguchi, “Gone in 60 Seconds: Mobile-Phone TV Demands Quick Shows,” *The Washington Post*, January 30, 2005, p. A1; Noah Robischon, “Thanks to Cellphones, TV Screens Get Smaller,” *The New York Times*, February 15, 2005, p. B1.

drama “24” as well as other shows.<sup>48</sup> Likewise, in the summer of 2005, ABC announced a deal with Proteus, a provider of mobile content, to allow fans of ABC’s daytime soap operas and shows like “Alias” and Jimmy Kimmel Live to download such content through their cell phones.<sup>49</sup>

As Mark Mays, CEO of Clear Channel Communications, recently told *Business Week*, “it will become that much harder to capture consumers’ attention when a cell phone evolves into more of a media player, enabling people to read news reports, watch video, or play games.”<sup>50</sup> Of course, that world is already upon with many now referring to cell phones as the “Swiss Army knife” of consumer electronics.<sup>51</sup> A March 2004 survey by The Pew Internet & American Life Project reported 56 million (28 percent) of American adults are “wireless ready” in the sense that they use either laptop computers with wireless modems and Wi-Fi cards or cell phones to go online and surf the Web or check email.<sup>52</sup> And the younger generation is again blazing the way. *Business Week* reports that four out of five

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<sup>48</sup> Seth Sutel, “Fox to Provide TV Series for Wireless Phones,” *USA Today*, November 11, 2004, [http://www.usatoday.com/tech/wireless/phones/2004-11-10-tv-for-mobile-phones\\_x.htm?csp=15](http://www.usatoday.com/tech/wireless/phones/2004-11-10-tv-for-mobile-phones_x.htm?csp=15)

<sup>49</sup> Mike Musgrove, “Proteus Teams with ABC to Offer Cell Phone Content,” *The Washington Post*, August 9, 2005, p. D4.

<sup>50</sup> Tom Lowry, “Media’s New On-the-Go Consumers,” *Business Week Online*, July 12, 2004, [http://www.businessweek.com/magazine/content/04\\_28/b3891012\\_mz001.htm](http://www.businessweek.com/magazine/content/04_28/b3891012_mz001.htm)

<sup>51</sup> Two recent news stories referred to cell phones as technological “Swiss Army knives”: Christopher Rhoads, “Cell Phones Become ‘Swiss Army Knives’ as Technology Blurs,” *The Wall Street Journal*, January 4, 2005, p. B1; Stephanie N. Mehta, “It Even Makes Calls!” *Fortune*, January 10, 2005, p. 55.

<sup>52</sup> John B. Horrigan, “28% of American Adults are Wireless Ready,” *Pew Internet Project Data Memo*, Pew Internet & American Life Project, May 2004, [http://www.pewinternet.org/pdfs/PIP\\_Wireless\\_Ready\\_Data\\_0504.pdf](http://www.pewinternet.org/pdfs/PIP_Wireless_Ready_Data_0504.pdf)

college students carry cell phones and 36 percent of them use them to send and receive instant data messages—twice the national average.<sup>53</sup>

- **The potential for wireless technology to revolutionize media** become obvious when coupled with computing and Internet technologies and conjures up images of a future previously imagined only in sci-fi novels and movies. Dick Tracy-esque wireless watches are already upon us, for example.<sup>54</sup> “Wearable computing” is also set to go mainstream. Companies are already marketing clothing items with built-in communications and computing capabilities. Soon, in true Star Trek fashion, we will be able to make a phone call or play an audio clip by tapping a button on our shirts.<sup>55</sup> And many firms are attempting to develop miniature computer screens for the inside of eyeglasses or sunglasses to provide instant information. More practically speaking, the “wireless home” is already a reality thanks to “Wi-Fi” networks and routing technology.<sup>56</sup> Very soon, citizens will be able to tap media connections almost anywhere inside or outside of their homes thanks to these developments. This explains why the headline of a June 2004 *Reuters* story read: “Media

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<sup>53</sup> Baker, p. 70.

<sup>54</sup> “Thanks to Microsoft, now you can buy a watch that receives news, weather, e-mail, sports scores, stock prices, and more—all for under \$300, plus the low subscription price of \$9.95 a month.” Grainger David, “Subscription Burnout,” *Fortune*, February 23, 2004, p. 86.

<sup>55</sup> “Science Fiction? Not Any More,” *The Economist Technology Quarterly*, September 18, 2004, p. 4.

<sup>56</sup> See David Carnoy, “How to Really Network Your Home,” *ZD Net AnchorDesk*, July 9, 2004, [http://reviews-zdnet.com.com/AnchorDesk/4520-7298\\_16-5142980.html?tag=adts](http://reviews-zdnet.com.com/AnchorDesk/4520-7298_16-5142980.html?tag=adts)

Companies Take Wireless Route.”<sup>57</sup> In the future, almost all media content will need to be accessible via wireless devices in order to satisfy consumer demand for increasing mobility. Notes John Garcia, Sprint senior VP of sales and distribution, after broadcast and cable, “The wireless phone is becoming the third screen of [consumer’s] life. They want [cell] phone[s] to do everything that their TV does and everything that their PC does.”<sup>58</sup>

- **Other new home media and computer devices promise to accelerate media convergence.** In the summer of 2005, Sling Media, Inc. introduced the “SlingBox,” a device that allows consumers to transmit their home television content to them via a broadband connection no matter where they are at.<sup>59</sup> In other words, any TV show, local news program, or regional sporting event that a viewer would be able to watch if they were at home will now be available to them on-the-road, thousands of miles away from their TV sets. So long as the consumer has a computer and a broadband connection, the SlingBox can make “anywhere, anytime” TV on the PC a reality.

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<sup>57</sup> Sinead Carew, “Media Companies Take Wireless Route,” *Reuters*, June 23, 2004, <http://www.reuters.com/newsArticle.jhtml?type=topNews&storyID=5498032>

<sup>58</sup> Michael Grebb, “Cable Wants to Cut the Cord,” *Wired News*, July 28, 2005, <http://www.wired.com/news/wireless/0,1382,68324,00.html>

<sup>59</sup> Rob Pegoraro, “The Slingbox Puts Your TV Set Online. But Why?” *The Washington Post*, July 17, 2005, p. F7.

- **Traditional print media outlets are also tapping new technologies and outlets to reach their audience.** *The New York Times*, for example, already has a significantly larger national reach online than it does through its printed paper, with around 13 million unique monthly Web visitors but only 1.13 million print subscribers.<sup>60</sup> Similarly, *The Washington Post's* offers the vast majority of its print content on its WashingtonPost.com website and about 80 percent of its 8.5 million unique visitors each month are located outside the Washington area.<sup>61</sup> To accommodate these new audiences, the *Post* even offers two distinct web pages, one for local readers and another for out-of-market visitors to the site.<sup>62</sup> Meanwhile, the online versions of these and other traditional newspaper outlets are beginning to use more customizable, interactive features, including access for many mobile media devices. The Associated Press, one of the oldest and most venerable media outlets in America, announced that starting in January 2006, it would be offering online video and news services to its member papers for them to use on their websites.<sup>63</sup>

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<sup>60</sup> David Kesmodel, "Times Mulls Subscriptions for Internet Archives," *The Wall Street Journal*, May 3, 2005; "Key Traffic Statistics for NYTimes.com," *The New York Times Digital*, <http://www.nytdigital.com/learn/statistics.html>.

<sup>61</sup> Frank Barnako, "Two Home Pages for Washington Post," *CBS MarketWatch*, July 15, 2005, <http://www.marketwatch.com/news/story.asp?dist=nbi&param=archive&siteid=mktw&guid=%7B3D92A235%2D8086%2D4C34%2DA678%2DFF3304768145%7D&garden=&minisite=>

<sup>62</sup> Ibid.

<sup>63</sup> Ken Kerschbaumer, "AP To Launch Online Video Net," *Broadcasting & Cable*, July 21, 2005, <http://www.broadcastingcable.com/article/CA628537.html?display=Breaking+News&referral=su>  
[pp](http://www.broadcastingcable.com/article/CA628537.html?display=Breaking+News&referral=su)

### 3) *The Rise of Interactive, Participatory Media*

- **The nature of the journalism profession is being fundamentally changed** by media convergence and rapid technological innovation. Journalism is becoming far more participatory and user-driven.<sup>64</sup> Citizens are becoming both consumers and producers of news, or “pro-sumers.”<sup>65</sup> Younger Americans are especially attracted to this new “do-it-yourself” brand of citizen journalism.<sup>66</sup> New online audio and video “streaming” technologies already allow citizens to be micro-programmers. A July 2004 *New York Times* article revealed that over 100 independent television stations currently stream video over the Net.<sup>67</sup> But much bigger developments are underway. Aggregators trying to capture individuals’ media creations are popping up. Websites like Ourmedia, Flickr, DeviantArt and many others allow users to post their own media online for free and share it with others. These sites are quickly attracting large communities as they provide free distribution platforms.<sup>68</sup> Flickr, was recently purchased by Yahoo!, evidence that the large media firms recognize this as a notable trend.<sup>69</sup>

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<sup>64</sup> See Shayne Bowman and Chris Willis, *We Media: How Audiences are Shaping the Future of News and Information* (Reston, VA: The American Press Institute, 2003), <http://www.mediacenter.org/mediacenter/research/wemedia/>; Dan Gilmore, *We the Media: Grassroots Journalism by the People, For the People* (Sebastopol, CA: O’Reilly Media, Inc., 2004).

<sup>65</sup> *The State of the News Media 2004: An Annual Report on American Journalism* (Washington, D.C.: Project for Excellence in Journalism, 2004), p. 4, <http://www.stateofthenewsmedia.org/index.asp>.

<sup>66</sup> See Ariana Eun Jung Cha, “Do-It-Yourself Journalism Spreads,” *The Washington Post*, July 17, 2005, p. A1.

<sup>67</sup> Tim Gnatok, “Internet TV: Don’t Touch That Mouse!” *The New York Times*, July 1, 2004, p. E5.

<sup>68</sup> Jo Twist, “Citizens Do Media for Themselves,” *BBC*, August 10, 2005, <http://news.bbc.co.uk/2/hi/technology/4728259.stm>.

<sup>69</sup> Jim Hu, “Yahoo Buys Photo-sharing Site Flickr,” CNET, March 20, 2005, [http://news.zdnet.com/2100-9595\\_22-5627640.html](http://news.zdnet.com/2100-9595_22-5627640.html).

Blogging and podcasting are two prime examples of this sort of prosumer, participatory journalism in action. Blogs, which are basically online journals, range from the mundane to the profound in terms of subject matter. Although still a very new media phenomenon, there are already 14 million blogs in existence according to the three leading blog tracking sites Technorati, BlogPulse, and PubSub.

Podcasts, which are audio blogs that can be transferred to iPods and other mobile device, are the latest media craze.<sup>70</sup> Podcasting allows average citizens to essentially become one-person radio broadcasters.<sup>71</sup> Technology columnist Rob Pegoraro of *The Washington Post* boasts that “unlike radio, [podcasting] has infinite room for anybody; there isn’t a fixed set of channels.... Podcasting may be a mess, but at least it’s a mess that everybody has the same access to.”<sup>72</sup> Of course, traditional media operators are jumping into the podcasting bandwagon as well, rolling out many of their popular programs as podcasts.<sup>73</sup> As Figure 3 reveals that podcasting is set to explode in coming years if current trends continue.

#### **Figure 4: Forecasted Podcasting Growth**

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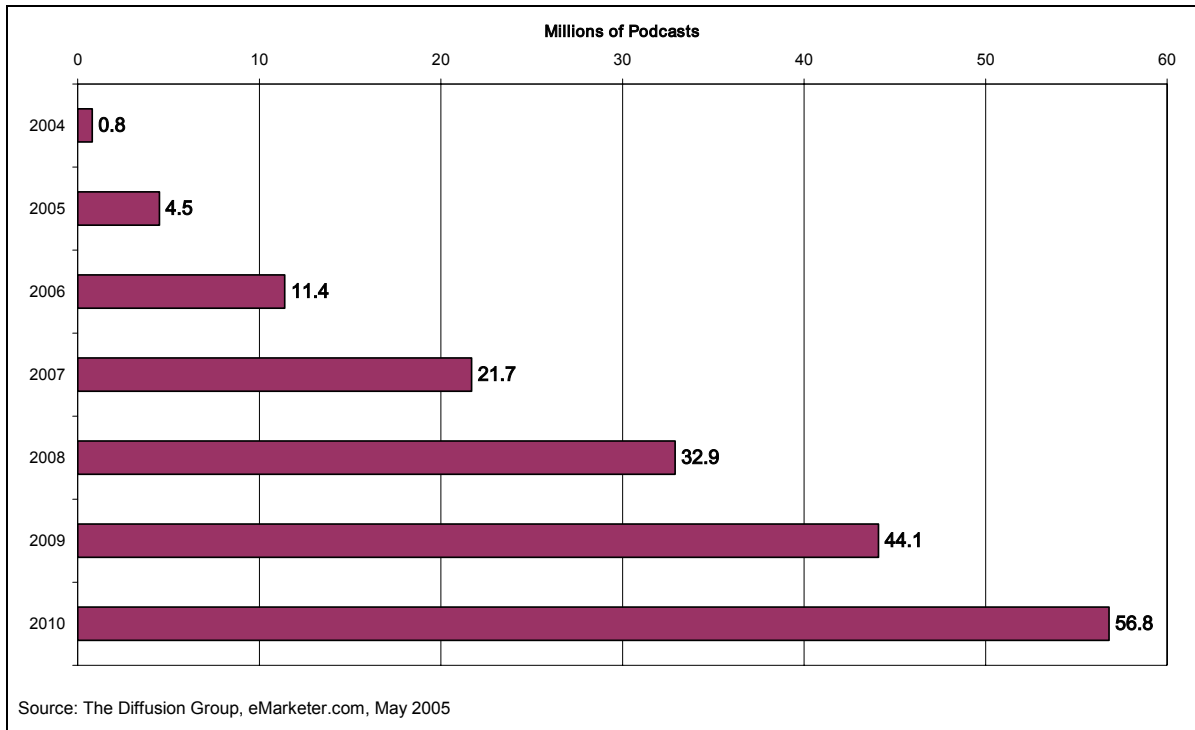
<sup>70</sup> David Pogue, “In One Stroke, Podcasting Hits Mainstream,” *The New York Times*, July 28, 2005, p. C1.

<sup>71</sup> Dan Tynan, “Singing the Blog Electric: Podcast Your Way to Stardom,” *PC World*, August 2005, p. 120.

<sup>72</sup> Rob Pegoraro, “Apple Plants a Seed to Help Raise Podcasting,” *The Washington Post*, July 24, 2005, p. F9, <http://www.washingtonpost.com/wp-dyn/content/article/2005/07/23/AR2005072300051.html>

<sup>73</sup> Anjali Athavaley, “Mainstream Media is Tuning in to ‘Podcasting,’” *The Washington Post*, July 18, 2005, p. A1.





The next big trend could be “vlogging,” which is the marriage of blogging, podcasting and video clips.<sup>74</sup> And although still just a theoretical technology, “roadcasting” is an intriguing new system that would marry MP3s, Wi-Fi networks, and file sharing—while on the road. According to a recent *Wired* article, roadcasting “would allow drivers to stream their MP3 music collections by Wi-Fi or similar technology to any other vehicle within range that is equipped with compatible hardware and software.”<sup>75</sup> It would also likely include a collaborative-filtering mechanism “that compares music in a recipients’ collection to that of the broadcaster. The filter will

<sup>74</sup> Katie Dean, “Blogging + Video = Vlogging,” *Wired News*, July 13, 2005, [http://www.wired.com/news/digiwood/0,1412,68171,00.html?tw=newsletter\\_t](http://www.wired.com/news/digiwood/0,1412,68171,00.html?tw=newsletter_t)

<sup>75</sup> Daniel Terdiman, “Watch for Roadcasting Rage,” *Wired News*, May 31, 2005, <http://www.wired.com/news/digiwood/0,1412,67653,00.html>

pump out a mix of songs matching the listener's tastes."<sup>76</sup> Presumably, a roadcasting system could also transfer podcasts and other types of do-it-yourself digital broadcasts.

While blogging, podcasting and these other forms of online journalism are still in their infancy, camcorders, digital cameras, and even cell phone cameras have already given citizens the ability to personally capture history at any given moment and then distribute it across the globe on the Internet. For example, in the wake of the London terrorist bombings in July 2005, Ed Richards, Senior Partner in Strategy and Market Development with Ofcom, the UK communications and media regulatory agency, noted commented how the tragedy illustrated the extent to which there has been "a gradual transfer of power from broadcaster, distributor and supplier, to viewer, listener and consumer."<sup>77</sup> As the tragedy unfolded, the first news and pictures from the bombing sites came from average citizens who used their multimedia devices to transmit what they saw and heard. Edwards noted argued that this episode reflected the sweeping changes underway in modern media that will allow consumers of news to become creators of it as well. "The self-creation of content and the self-distribution of that

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<sup>76</sup> Ibid.

<sup>77</sup> Dan Milmo and Cosima Marriner, "Blogs, Podcasts and Camera Phones Fill the Airwaves," *Guardian Unlimited*, July 20, 2005, <http://www.guardian.co.uk/business/story/0,,1531932,00.html>

content ... is a really important and significant long-term development which we have hardly scratched the surface of,” he said.<sup>78</sup>

### III. Ownership Caps Reconsidered

In light of these amazing changes sweeping through the media landscape, the ownership caps put in place for the old analog era seem ill-suited for our fast-paced new digital world. Moreover, an examination of developments in the multichannel video marketplace over the past 13 years since ownership rules were imposed reveals that any fears Congress once held about “market power” in this sector can safely be put to rest.

As background, the Cable Act of 1992 directed the FCC to create both horizontal and vertical caps on cable ownership or vertical integration. The FCC’s resulting horizontal rule imposed a 30 percent cap on the number of subscribers that may be served by an operator. The vertical rule placed a cap of 40 percent on the amount of proprietary programming operators could put on their own systems. In the wake of a court challenge, the United States Court of Appeals for the District of Columbia Circuit remanded the rules to the agency in the March 2001 decision *Time Warner Entertainment v. FCC* for further consideration.<sup>79</sup>

The goal of the market caps was to promote competition and protect consumers from any one cable company gaining too much market and pricing power.<sup>80</sup> But when the D.C. Circuit reviewed these rules in the *Time Warner* case, it found the FCC had failed to make a distinction between market share

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<sup>78</sup> Ibid.

<sup>79</sup> *Time Warner Entertainment Co. v. FCC*, 240 F.3d 1126 (D.C. Cir. 2001).

<sup>80</sup> Ibid., p. 41.

and market power.<sup>81</sup> The court also realized that the relevant market is now much larger than just the traditional cable. DBS, telephone operators, mobile media providers and the Internet all must now be included in any analysis of market power in the multichannel video marketplace.

#### **A. Diversity and Consumer Choice Have Never Been More Vibrant**

Two key issues with which Congress was concerned when it enacted cable ownership rules were choice and diversity. Thus, the two questions central to any review of ownership rules are as follows:

1. Do consumers now have more or fewer choices in the multichannel video marketplace?
2. Is video programming more diverse today, or less? Are more networks and programs available today, especially niche programming, than in the past?

In the following sections we will show that consumers now have many more choices in the multichannel video market and additionally that programming is more diverse.

The FCC has found that while there were only 70 video programming networks available in 1990, by the end of 2004, 388 video programming networks

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<sup>81</sup> “Having failed to identify a non-conjectural harm, the Commission could not possibly have address the connection between harm and market power.” *Time Warner Entertainment Co. v. FCC*.

existed.<sup>82</sup> The agency has also noted that in 1992 most cable systems only had the capacity to carry between 30 and 53 analog channels of service. Today, by contrast, cable operators provide, on average, 70 analog and 150 digital video channels.<sup>83</sup> Moreover, they are providing all those extra channels alongside an expanded portfolio of other services, including: HDTV, video-on-demand and pay-per-view services, interactive guides, Internet access, and IP-telephony.

Importantly, the concerns stressed by Congress over vertical integration in the video programming sector have proven to be unfounded. It is true in an absolute sense that vertical integration of content and conduit today has increased over past years, but it is also true that there are far more television networks than ever before. Consequently, measured as a percentage of the overall number of networks that exist, vertical integration has been steadily *decreasing* over the past decade.<sup>84</sup> In fact, as Table 3 and Figure 5 illustrate, by 2004 the percentage of vertically integrated networks had hit a 14-year low at just 23 percent of all networks.<sup>85</sup>

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<sup>82</sup> Federal Communications Commission, *Eleventh Annual Video Competition Report*, February 4, 2005, p. 78, [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/FCC-05-13A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-05-13A1.pdf).

<sup>83</sup> Federal Communications Commission, *The Commission's Cable Horizontal and Vertical Ownership Limits*, Second Further Notice, 20 FCC Rcd. 9374, May 17, 2005, p. 30.

<sup>84</sup> FCC, *Tenth Annual Video Competition Report*, pp. 87-91.

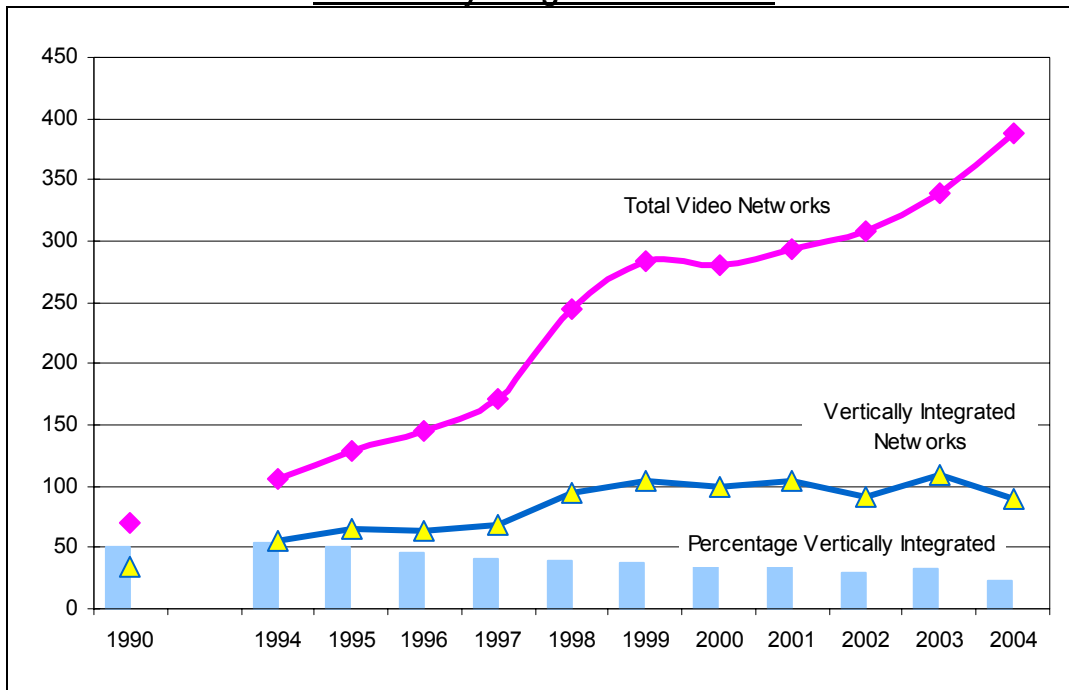
<sup>85</sup> FCC, *Eleventh Annual Video Competition Report*, p. 78.

**Table 3: Vertical Integration of Video Programming Networks has Fallen**  
*(National Network Growth and Vertical Programming Integration, 1990-2004)*

Year	Total Number of Video Programming Networks	Number of Vertically Integrated Networks (networks owned by cable or satellite distributor)	Percentage of Vertically Integrated Networks
1990	70	35	50%
1994	106	56	53%
1995	129	66	51%
1996	145	64	45%
1997	172	68	40%
1998	245	95	39%
1999	283	104	37%
2000	281	99	35%
2001	294	104	35%
2002	308	92	30%
2003	339	110	33%
2004	388	89	23%

Source: Federal Communications Commission

**Figure 5: Overall Network Growth Far Outpaces Growth of Vertically Integrated Networks**



Source: Federal Communications Commission

More importantly, compared to the past, there is clearly more differentiated programming on cable and satellite television than ever before. As was described earlier in the paper, market forces are fragmenting traditional audiences and opening up large, new markets for diverse, niche programming. Cable and satellite television is home to an increasingly splintered smorgasbord of demographically diverse fare, as shown in Table 4.

**Table 4: The Expanding Video Programming Marketplace  
on Cable and Satellite TV**

<b><u>News:</u></b> <i>CNN, Fox News, MSNBC, C-Span, C-Span 2, C-Span 3, BBC America</i>
<b><u>Sports:</u></b> <i>ESPN, ESPN News, ESPN Classics, Fox Sports, TNT, NBA TV, NFL Network, Golf Channel, Tennis Channel, Speed Channel, Outdoor Life Network, Fuel</i>
<b><u>Weather:</u></b> <i>The Weather Channel, Weatherscan</i>
<b><u>Home Renovation:</u></b> <i>Home &amp; Garden Television, The Learning Channel, DIY</i>
<b><u>Educational:</u></b> <i>The History Channel, The Biography Channel (A&amp;E), The Learning Channel, Discovery Channel, National Geographic Channel, Animal Planet</i>
<b><u>Travel:</u></b> <i>The Travel Channel, National Geographic Channel</i>
<b><u>Financial:</u></b> <i>CNNfn, CNBC, Bloomberg Television</i>
<b><u>Shopping:</u></b> <i>The Shopping Channel, Home Shopping Network, QVC</i>
<b><u>Female-oriented:</u></b> <i>WE, Oxygen, Lifetime Television, Lifetime Real Women, Showtime Women</i>
<b><u>Male-oriented:</u></b> <i>Spike TV</i>
<b><u>Family / Children-oriented:</u></b> <i>Nickelodeon, Disney Channel, Cartoon Network, WAM (movie channel for 8-16-year-olds), Noggin (2-5 years)/The N Channel (9-14 years), PBS Kids, Hallmark Channel, Hallmark Movie Channel, Discovery Kids, Animal Planet, ABC Family, Boomerang, Familyland Television Network, HBO Family, Showtime Family Zone, Starz! Family, Toon Disney</i>
<b><u>African-American:</u></b> <i>BET, Black Starz! Black Family Channel</i>
<b><u>Foreign / Foreign Language:</u></b> <i>Telemundo (Spanish), Univision (Spanish), Deutsche Welle (German), BBC America (British), AIT: African Independent Television, TV Asia, ZEE-TV Asia (South Asia) ART: Arab Radio and Television, CCTV-4: China Central Television, The Filipino Channel (Philippines), Saigon Broadcasting Network (Vietnam), Channel One Russian Worldwide Network, The International Channel, HBO Latino, History Channel en Espanol</i>
<b><u>Religious:</u></b> <i>Trinity Broadcasting Network, The Church Channel (TBN), World Harvest Television, Eternal Word Television Network (EWTN), National Jewish Television, Worship Network</i>
<b><u>Music:</u></b> <i>MTV, MTV 2, MTV Jams, MTV Hits, VH1, VH1 Classic, VH1 Megahits, VH1 Soul, VH1 Country, Fuse, Country Music Television, Great American Country, Gospel Music Television Network</i>
<b><u>Movies:</u></b> <i>HBO, Showtime, Cinemax, Starz, Encore, The Movie Channel, Turner Classic Movies, AMC, IFC, Flix, Sundance, Bravo (Action, Westerns, Mystery, Love Stories, etc.)</i>
<b><u>Other or General Interest Programming:</u></b> <i>TBS, USA Network, TNT, FX, SciFi Channel</i>

There now exist multiple channels dedicated to the interests of women, children, ethnic groups, religious groups, children, and so on. Falling production and distribution costs will continue to fragment the market and drive expansion of niche programming options over the coming years, regardless of who owns the distribution channels.

## **B. No Need to Fear Pricing Power or Exclusionary Dealing**

The ownership caps are theoretically designed to prevent a cable operator from restricting which content providers can reach the market. It is widely recognized that in order for such restriction to be a risk, the primary market must be highly concentrated. When determining whether the market is concentrated, it is important to note that the relevant market for analysis is national, not local.<sup>86</sup> A cable company with high concentration in a local market will not be able to apply market power so long as there are other options for distributing content to large portions of the national market.<sup>87</sup>

Cable operators are unable to leverage any local market power they might have so long as content providers and consumers can easily switch to other providers, such as DBS, telephone operators and others. The high degree of subscriber churn at cable companies is strong evidence that consumers who become unhappy with a cable company's service or programming options can easily switch to another provider. "There has always been a fairly high degree of turnover, or churn, in cable," argue economists Benjamin Bates and Todd

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<sup>86</sup> Christopher Yoo, "Architectural Censorship and the FCC," *Southern California Law Review*, Vol. 78, 2005, pg. 705.

<sup>87</sup> *Ibid.*



Chambers.<sup>88</sup> “In the marketing battle with DBS providers and other competing uses, local cable systems must continually invest in advertising and marketing campaigns to prevent subscriber turnover (churn).”<sup>89</sup>

As the D.C. Circuit noted, “If a [multichannel video programming distributor] refuses to offer new programming, customers with access to an alternative [multichannel video programming distributor] may switch. The FCC shows no reasons why this logic does not apply to the cable industry.”<sup>90</sup> With DBS already passing every home in the country and new services proliferating, it is difficult to imagine how the FCC could conclude this market is not highly contestable.

Given the highly contestable nature of this market, cable operators do not have the ability gouge customers. With eager competitors lurking nearby in this converging market, gouging customers would be a very poor business decision. For example, if a cable company tried to raise subscription prices or advertising rates after a merger, the company would be handing over significant market share to the Bells and DBS providers. According to a recent paper published by the FCC, DBS does constrain cable providers’ ability to price freely. Consumers will switch to DBS once the quality-adjusted price of basic cable becomes greater than the cost of switching.<sup>91</sup>

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<sup>88</sup> Benjamin J. Bates and Todd Chambers, “The Economics of the Cable Industry,” in Alison Alexander, James Owers, Rod Carveth, C. Ann Hollifield, and Albert N. Greco, eds., *Media Economics: Theory and Practice* (Mahwah, NJ: Lawrence Erlbaum Associates, 2004), p. 186.

<sup>89</sup> *Ibid.*

<sup>90</sup> *Time Warner Entertainment Co. v. FCC.*

<sup>91</sup> Andrew S. Wise and Kiran Duwadi, “Competition Between Cable Television and Direct Broadcast Satellite—It’s More Complicated than You Think,” Federal Communications Commission, *Media Bureau Staff Research Paper*, January 2005, [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/DOC-255869A1.pdf](http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-255869A1.pdf).

As further evidence that the critics' fears over broadband pricing power are unfounded, at least once a year, news headlines can be found that read something like this: "Cable Joins Broadband Price War," with both TW and Comcast being involved in the battle.<sup>92</sup> Indeed, far from gouging consumers, Comcast has been actively offering promotional pricing discounts for the past two years, even after their purchase of AT&T's cable systems, and currently has gone so far as to give away free digital cameras and MP3 players to new subscribers.<sup>93</sup> SBC's recent move to cut prices on high-speed Internet service to only \$14.95—less than the cost of TW's AOL dial-up service—also indicates price competition is fierce.<sup>94</sup> "This is definitely a direct attack on the cable operators," notes Patrick Mahoney, senior analyst of the Yankee Group Research Inc., and it "definitely puts pressure on the cable operators to lower their prices."<sup>95</sup> Already, cable and telecom operators are crafting competitive service bundles that offer significant discounts if subscribers opt for several services together, such as phone, video and data.<sup>96</sup>

Similarly, there is no reason to fear that the absence of cable ownership caps will allow any cable operator to leverage the content properties they own to

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<sup>92</sup> See <http://www.comcastspecial.com/> and the following articles: Jim Hu, "Cable Joins Broadband Price War," *CNET News.com*, November 12, 2003, [http://news.com.com/Cable+joins+broadband+price+war/2100-1034\\_3-5106326.html](http://news.com.com/Cable+joins+broadband+price+war/2100-1034_3-5106326.html); "Broadband Wars: Fighting for the Customer," *Xchange Magazine*, October 1, 2004, <http://www.xchangemag.com/articles/4a1consumer1.html>; Dionne Searcey, "The Price War for Broadband is Heating Up," *The Wall Street Journal*, June 29, 2005, p. D1. "SBC Lowers Broadband Prices for New Customers," *Reuters*, October 27, 2004, [http://news.com.com/SBC+lowers+broadband+prices+for+new+customers/2100-1035\\_3-5429833.html](http://news.com.com/SBC+lowers+broadband+prices+for+new+customers/2100-1035_3-5429833.html).

<sup>93</sup> *Ibid.*

<sup>94</sup> Dionne Searcey, "A New Low Price for Broadband," *The Wall Street Journal*, June 1, 2005.

<sup>95</sup> Quoted in Ken Kerschbaumer, "Battle of the Broadbands: SBC's Price Cut on DSL May Pressure Cable to Follow," *Broadcasting & Cable*, June 6, 2005, p. 22.

<sup>96</sup> See Shawn Young and Peter Grant, "What the Phone Deals Mean for You," *The Wall Street Journal*, May 4, 2005, p. D1.

gain advantage over rivals or to gouge customers. Program ownership by major cable operators is very diffuse. Consider Comcast and Time Warner (TW), two of the largest players in the sector. Comcast owns very little programming and does not have an attributable interest in any of the top 20-rated cable networks.<sup>97</sup>

While TW owns many more content properties than Comcast, it only holds four of the top 20 programming services as measured by subscribership (Table 5) and two of the top 15 programs as measured by prime time rating (Table 6).<sup>98</sup>

**Table 5: Top 20 Programming Services by Subscribership, 2004**

Rank	Programming Network	Number of Subscribers (Millions)	Ownership Interest in Network
1	Discovery Channel	88.6	Cox, Advance Newhouse, Liberty Media
2	ESPN	88.4	Disney, Hearst
3	CNN	88.2	<b>Time Warner</b>
4	TNT	88.2	<b>Time Warner</b>
5	TBS	88.1	<b>Time Warner</b>
6	USA Network	88.1	NBC Universal
7	Nickelodeon	87.9	Viacom
8	C-SPAN	87.8	National Cable Satellite Corp.
9	A&E	87.7	Disney, Hearst, NBC-Universal
10	Lifetime Television	87.5	Disney, Hearst
11	The Weather Channel	87.5	Landmark
12	Spike TV	87.2	Viacom
13	TLC	87	Cox, Advance Newhouse, Liberty Media
14	ABC Family Channel	86.8	Disney

<sup>97</sup> FCC, *Eleventh Annual Video Competition Report*, p. 147. Comcast's largest content properties are E! Entertainment (60.5 percent ownership interest), The Golf Channel (99.9 percent interest), The Outdoor Life Network (100 percent interest), and The Style Network (60.5 percent interest). It also controls an interest in a variety of regional sports networks.

<sup>98</sup> *Ibid.*

15	ESPN 2	86.8	Disney, Hearst
16	MTV	86.7	Viacom
17	CNN Headline News	86.5	<b>Time Warner</b>
18	VH1	86.3	Viacom
19	CNBC	86.2	NBC-Universal
20	The History Channel	85.8	Disney, Hearst, NBC-Universal

Source: FCC, National Cable & Telecommunications Association

**Table 6: Top 15 Programming Services by Prime Time Rating, 2004**

Rank	Programming Network	Ownership Interest in Network
1	TNT	Time Warner
2	Nickelodeon	Viacom
3	USA Network	NBC Universal
4	Nick at Nite	Viacom
5	Disney Channel	Disney
6	ESPN	Disney, Hearst
7	Toon Disney	Disney
8	Lifetime	Disney, Hearst
9	Fox News Channel	Fox
10	TBS	<b>Time Warner</b>
11	MTV	Viacom
12	FX	Fox
13	The History Channel	Disney, Hearst, NBC-Universal
14	Discovery Channel	Cox, Advance Newhouse, Liberty Media
15	A&E	Disney, Hearst, NBC-Universal

Source: FCC, National Cable & Telecommunications Association

#### **IV. First Amendment Considerations**

Importantly, this filing has not explored the First Amendment concerns associated with ownership restrictions on media operators. A strong case can be made that interference with media structures and business plans are tantamount

to what law professor Christopher Yoo calls “architectural censorship.”<sup>99</sup> That is, ownership restrictions can have a “tangential, but important adverse impact on speech” by artificially limiting market structures or outputs; structural controls can limit the quantity and quality of media created.<sup>100</sup> Stated differently, ownership restrictions can diminish the editorial discretion of media operators by regulating the soapbox they hope to build to speak to the public.<sup>101</sup> Therefore, as PFF has noted in a previous filing on this matter, “in an area in which the Commission has some discretion, the less restrictive the limits, the more the Commission honors the First Amendment values that should always be one of its paramount concerns.”<sup>102</sup>

## V. Conclusion

In sum, the media market is undergoing fundamental, structural changes that must be considered when making future regulatory decisions. This paper proposes a new framework for understanding how the market is changing and what the economic and diversity consequences are. Overall, the number of sources for programming and the variety of programming has grown dramatically. The relevant market for evaluating cable ownership caps must now include DBS, telecommunications companies and the Internet. It is our

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<sup>99</sup> Yoo, “Architectural Censorship and the FCC.”

<sup>100</sup> *Ibid.*, p. 674.

<sup>101</sup> See Thierer, *Media Myths*, pp. 126-130.

<sup>102</sup> Jeffrey A. Eisenach and Randolph J. May, “Comments of the Progress and Freedom Foundation,” *In the Matter of The Commission’s Cable Horizontal and Vertical Ownership Limits*, MM Docket No. 92-264, January 4, 2002, p. 9.

conclusion that the ownership caps are no longer necessary given the degree of competition and diversity in this marketplace.